



SOLAR 
Dynamic LED Lighting

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SOLAR 

Dynamic LED Lighting

Solar are designers and manufacturers of quality LED lighting solutions, offering a wide range of Luxeon based products to suit the requirements of architects, lighting specifiers, lighting designers and OEM's.

Solar is a member of the Lumileds "Certified Luxeon Luminaire Manufacturers" network, offering a full range of services from bespoke light engines to full custom LED based Luminaire design and manufacture. As a recognised Luxeon network member using in house UK production, Solar are also a member of the "Future Electronics Luxeon Solutions Providers partnership".



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HQ2 Canary Wharf

Installation consisting of 152 M200-B's in RGB with the use of 825 optics



Alexandra Hotel

The Alexandra Hotel in Oban, Scotland installed a mixture of M200-B and M100-B specials in marine grade anodised aluminium



L-80

The L-80 is a compact linear unit available in both RGB colour change and a wide variety of single colours. The L-80 allows designers infinite flexibility to create lighting effects for cornice, cove, bar front and many other applications. The unit comes ready heat sunk for ease of installation and is available with or without optics to suit the specific application requirement.

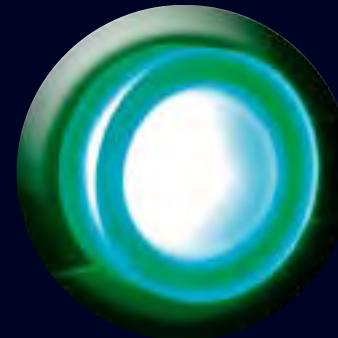
With a simple plug and socket connection, this allows up to 12 units to be connected to project a continuous line of light. This is compatible with the Solar RGB DMX driver. As it is DMX controlled, multiple colour change or static options can be created offering deep saturated colours for a multitude of applications.

Typical Applications

- Signage
- Back lighting
- Decorative effects
- Effect lighting
- Cove & Cornice lighting
- Architectural lighting



ACR-40



ACR-40&75 Acrylic Round Brick

The acrylic round brick is designed to provide marker lighting, and to provide accent lighting to walls or display areas. The brick range is available in a variety of colours.

The unit is sealed for indoor or outdoor use and provides excellent glowing effects through a frosted acrylic face. All units use high intensity Luxeon LEDs that provide superior light performance.

Typical Applications

- Wall effect lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



ACR-75-S



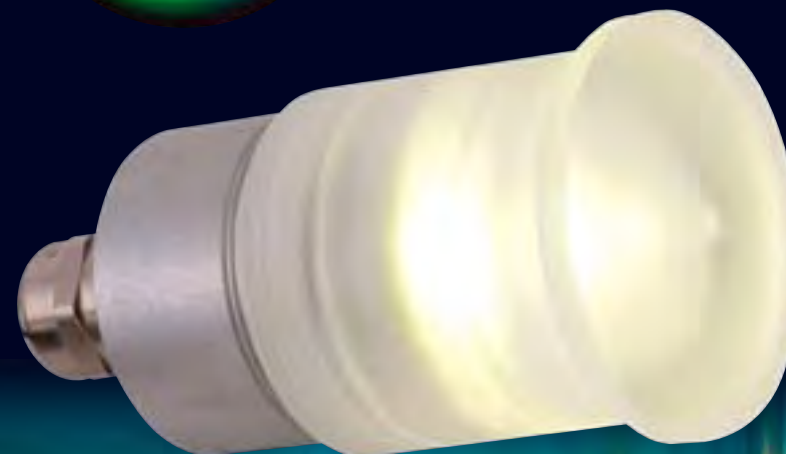
ACR-40-S&75-S Acrylic Saucers

The acrylic saucer is designed to provide marker lighting for pathways or simply to provide accent lighting to counters, decking, walls or display areas. The saucer range comes in two sizes and is available in a variety of colours.

The unit is sealed for indoor and outdoor use and provides excellent glowing effects through a frosted acrylic face. All units use 1 high intensity LED from Luxeon that provide superior lumen maintenance and light output.

Typical Applications

- Wall effect lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M80-B

The M80-B is a 3 or 6 LED bracketed unit that has a silver anodised finish. It can be used for both internal and external applications.

The M80-B is available in variety of single LED colours, RGB colour change or in a six colour change module with varying optical beam angles.

Typical Applications

- Down lights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M100-B-18

The M100-B-18 is an 18 LED light unit designed for a wall washing, up lighting and down lighting applications. Available in a variety of LED single colours or RGB colour change systems and with a choice of two optical beam angles including 6, and 25 degree.

The M100-B-18 is a sealed product designed for both indoor and outdoor installations enclosed in an anodised solid aluminium housing with a silver finish. A single connector and cable provide interconnect to the RGB or single colour power driver.

Typical Applications

- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M100-B-12

The M100-B-12 is a 12 LED light unit designed for a wall washing, up lighting and down lighting applications. Available in a variety of LED single colours or RGB colour change systems and with a choice of optical beam angles including 6, 10, 15, 25 or 8 x 25 degree.

The M100-B-12 is a sealed product designed for both indoor and outdoor installations enclosed in an anodised solid aluminium housing with a silver finish. A single connector and cable provide interconnect to the RGB or single colour power driver.

Typical Applications

- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M200-B

The M200-B is a high powered LED flood light unit designed for wall washing, up lighting and down lighting applications. The unit is available in a 30 LED single colour or 36 LED RGB colour changing array. Units are available in a choice of optical beam angles including 6, 10, 15, 25 or 8 x 25 degree.

The M200-B is a sealed product designed for both interior and exterior installation, enclosed in an anodised solid aluminium housing in silver finish.

Typical Applications

- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting





HQ2 Canary Wharf

Installation consisting of 152 M200-B's in RGB with the use of 825 optics

Newry Installation

This Installation in Newry, Ireland uses over 100m of exterior rated units in RGB



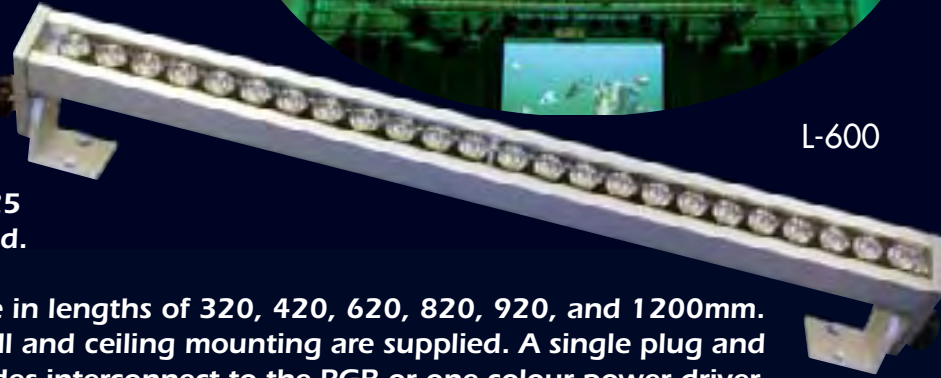
L-Series (INTERNAL)

L-Series is an LED Linear light unit designed for internal (for external see XL-Series) wall washing, up lighting and down lighting applications. Standard units are available with 12, 24 or 36 LEDs in a wide variety of single colours or RGB colour change systems. Optical beam angles of 6, 10, 25 or 8 x 25 degree can be selected.

The standard units are available in lengths of 320, 420, 620, 820, 920, and 1200mm. Mounting brackets for floor, wall and ceiling mounting are supplied. A single plug and play connector wire cable provides interconnect to the RGB or one colour power driver. Bolts can be adjusted on the bracket by an Allen key to a desired locking position.

Typical Applications

- Colour wall & Bar washing
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting

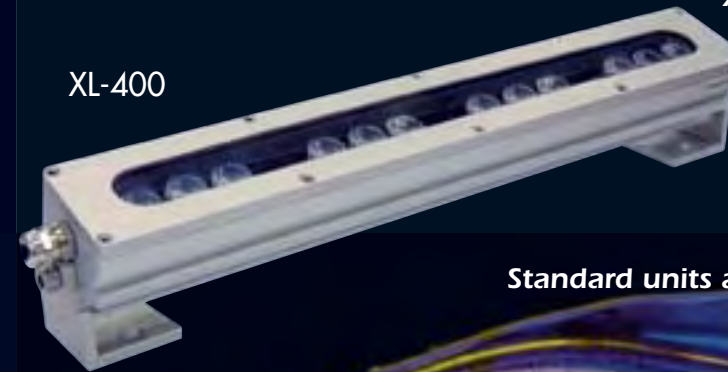


L-600

XL-1200



XL-400



XL-Series (EXTERNAL)

XL-Series is an LED Linear light unit designed for external use (for internal see L-Series) wall washing, up lighting and down lighting applications. Standard units are available with 12, 24 or 36 LEDs in a wide variety of single colours or RGB colour change systems. Optical beam angles of 6, 10, 25 or 8 x 25 degree can be selected.

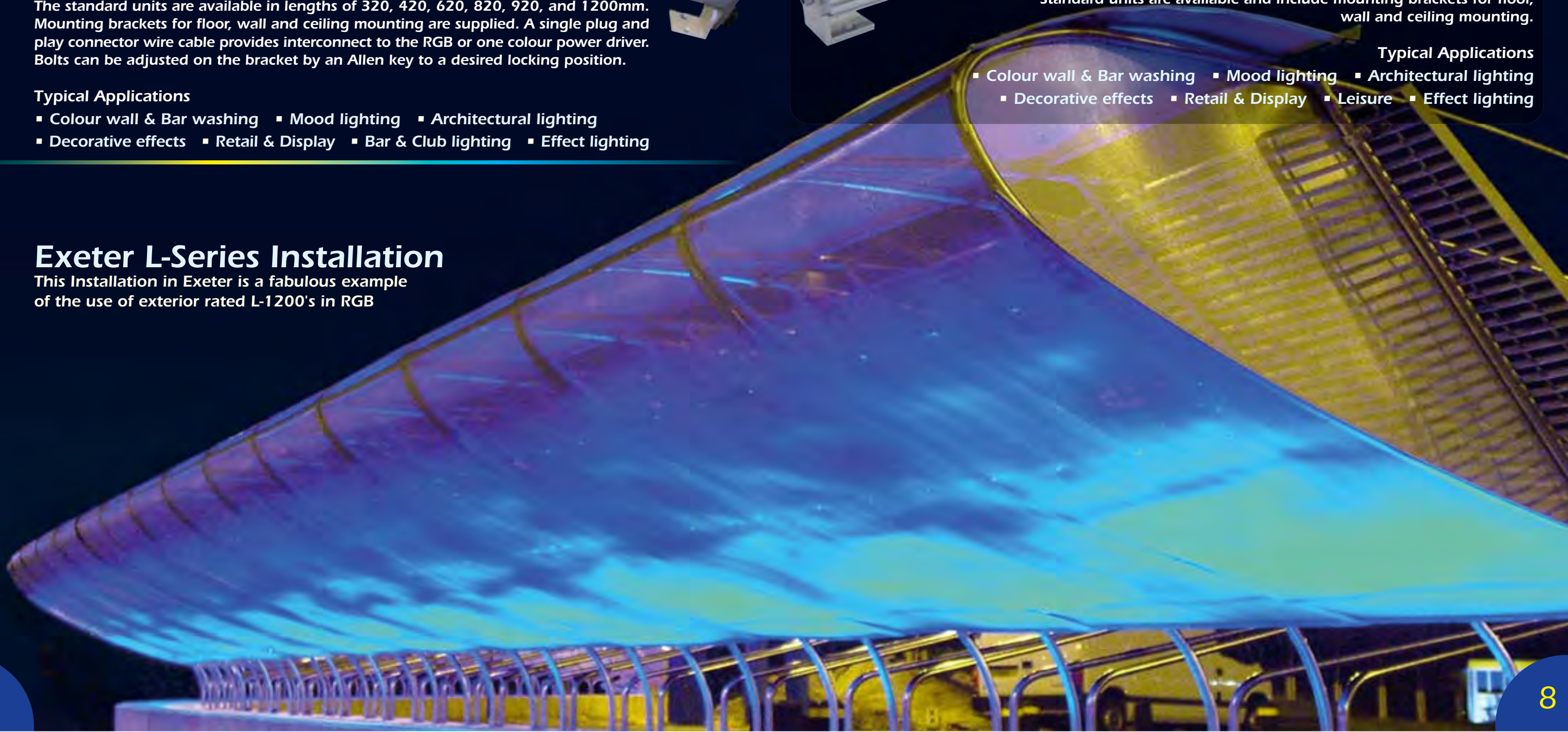
Standard units are available and include mounting brackets for floor, wall and ceiling mounting.

Typical Applications

- Colour wall & Bar washing
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Leisure
- Effect lighting

Exeter L-Series Installation

This Installation in Exeter is a fabulous example of the use of exterior rated L-1200's in RGB



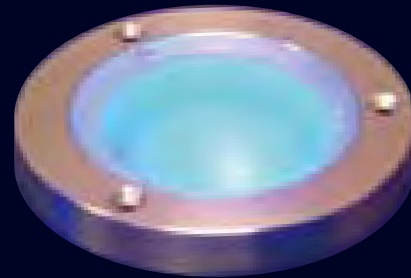
ACR-40-BEZ Acrylic Round Brick

The acrylic round brick with bezel is designed to provide marker lighting for pathways and to provide accent lighting to walls or display areas. The brick range is available in a variety of single LED colours.

The unit is sealed for indoor or outdoor use and provides excellent glowing effects through a frosted acrylic face. All units use high powered Luxeon LEDs to maximise light output.

Typical Applications

- Buried uplights
- Marker lighting
- Wall effect lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M20i (INGROUND)

The M20i LED unit is designed to be recessed as a micro marker light for interior effect lighting. The M20i can be supplied in stainless steel or silver anodised aluminium finish, with clear or frosted toughened glass lens. A wide variety of optical beam angles are available.

Typical Applications

- Buried uplights
- Marker lighting
- Wall effect lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting

ACR-75-BEZ-S Acrylic Saucers

The acrylic saucer with bezel is designed to provide marker lighting for pathways and to provide accent lighting to walls or display areas. The brick range is available in a variety of single LED colours.

The unit is sealed for indoor or outdoor use and provides excellent glowing effects through a frosted acrylic face. All units use high powered Luxeon LEDs to maximise light output.

Typical Applications

- Wall effect lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M80i (INGROUND)

The M80i in ground unit can be used in a wide variety of applications to provide marker or effect lighting. Available with flush or top hat bezel in silver anodised finish. Other finishes including stainless steel or chrome are available upon request.

The M80i is ideal for architects and designers requiring high output LED lighting. Units are available with a choice of optics, clear or frosted toughened glass is available in both the 3 and 6 watt versions. Mounting sleeves are also available.

Typical Applications

- Buried uplights
- Marker lighting
- Wall effect lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting

M100i-12 (INGROUND)

The M100i-12 in ground is a 12 LED up lighting unit. The unit is available in a variety of single LED colours or RGB colour change format. Bezels are available in a Silver anodised, Stainless Steel or Chrome finishes.

It is ideal for designers and architects that require high output LED lighting with a need for varying optical outputs. Mounting sleeves available and clear or frosted toughened glass lenses are available.

Typical Applications

- Walk & Drive over applications
- Buried uplights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M200i (INGROUND)

The M200-i in ground LED unit is designed to be recessed for in ground walkover / drive over LED lighting. The M200-i is available with 30 LED single colour LEDs or as a 36 LED RGB colour change unit with a choice of optical beam angles of either 6, 10, 15, 25 or 8 x 25 degree.

The M200-i is available with a flush or top hat bezel and with a choice of clear or frosted toughened glass lens. Mounting sleeves are also available.

Typical Applications

- Walk & Drive over applications
- Buried uplights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting

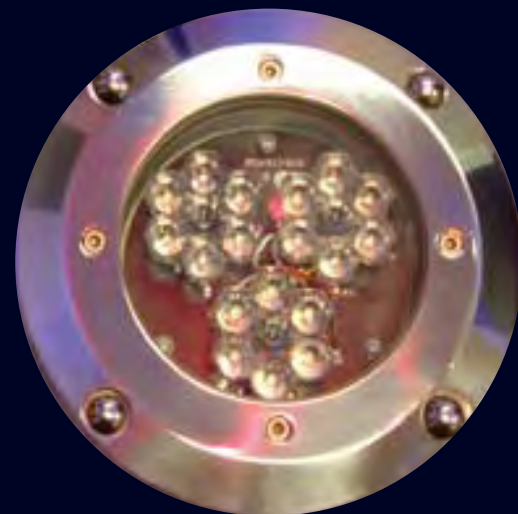
M100i-18 (INGROUND)

The M100i-18 in ground is an 18 LED up lighting unit. The unit is available in a variety of single LED colours or RGB colour change format.

Bezels are available in a Silver anodised, Stainless Steel or Chrome finishes. It is ideal for designers and architects that require high output LED lighting with a need for varying optical outputs. Mounting sleeves available and clear or frosted toughened glass lenses are available.

Typical Applications

- Walk & Drive over applications
- Buried uplights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M63i (INGROUND)

The M63i is a compact 3 LED up light unit for interior use. The unit is available in a variety of single LED colours or RGB colour change.

It is designed to provide excellent lighting effects for a wide variety of applications. Units are available with clear or frosted lens and with a choice of optics

Typical Applications

- Buried uplights
- Marker lighting
- Wall effect lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting

AR111-12 (INTERNAL)

The AR111-12 is an LED lamp retro-fit into most AR1-111 luminaires for indoor use. The unit is designed to offer lighting designers and specifiers a direct replacement lamp in Luxeon LED power from conventional halogen lamps.

It is offered in single colours and RGB colour change. This offers flexibility by offering SINGLE colour or RGB systems with an array of options on beam angles. Manufactured from precision machined aluminium the unit acts as a direct heat sink for LED PCB.

Typical Applications

- Down lights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



MR16-3 (INTERNAL)

The MR16-3 is a 3 LUXEON LED unit designed dimensionally to be similar to a standard tungsten halogen dichroic lamp.

The unit is available both in RGB colour change and Single LED colours offering unrivalled performance in colour saturation and effects.

The unit uses the latest in optical technology to offer beam angles such as focused spots to wall wash performance.

Typical Applications

- Down lights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



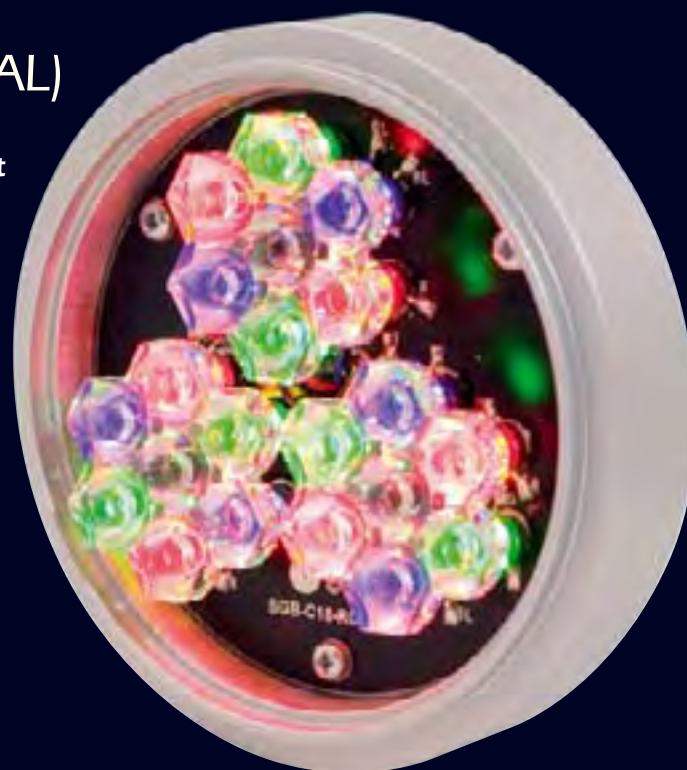
AR111-18 (INTERNAL)

The AR111-18 is an LED lamp retro-fit into most AR1-111 luminaires for indoor use. The unit is designed to offer lighting designers and specifiers a direct replacement lamp in Luxeon LED power from conventional halogen lamps.

It is offered in single colours and RGB colour change. This offers flexibility by offering SINGLE colour or RGB systems with an array of options on beam angles. Manufactured from precision machined aluminium the unit acts as a direct heat sink for LED PCB.

Typical Applications

- Down lights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



MR16-6 (INTERNAL)

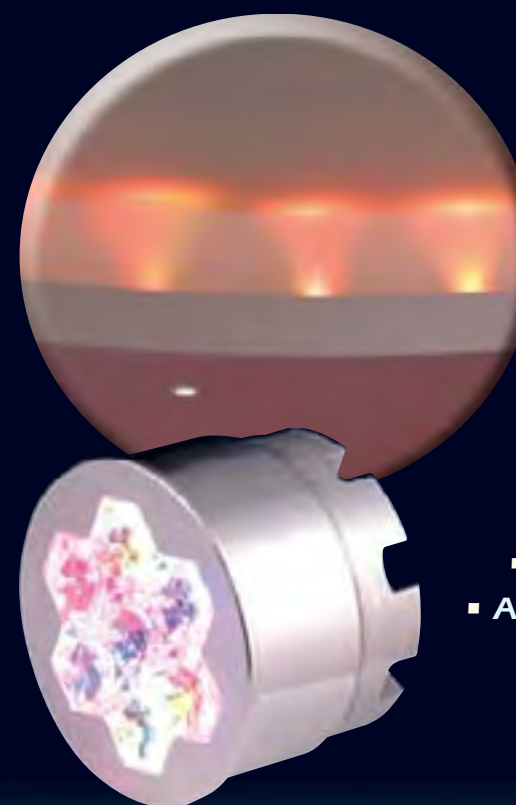
The MR16-6 is a 6 LUXEON LED unit designed dimensionally to be similar to a standard tungsten halogen dichroic lamp.

The unit is available both in RGB colour change and Single LED colours offering unrivalled performance in colour saturation and effects.

The unit uses the latest in optical technology to offer beam angles such as focused spots to wall wash performance.

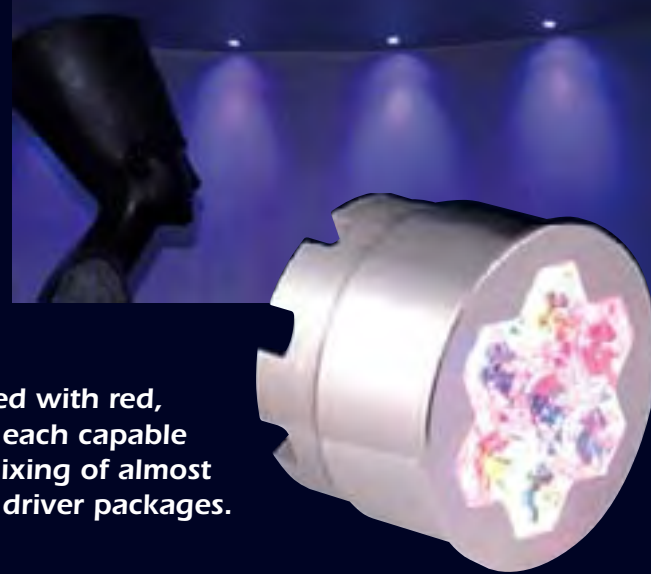
Typical Applications

- Down lights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



MR16-6 Six channel

The MR16-6 (six channel) is a unique replacement lamp designed dimensionally to fit into most halogen MR16 down light fixtures. The lamp uses 6 individual Luxeon 1 watt LED colours coupled with special optics offering wide and narrow beam angles.



As an example this six channel unit can be supplied with red, green, blue, white, warm white, and amber LED's each capable of being individually controlled. This allows the mixing of almost infinite colours when controlled using the correct driver packages.

Typical Applications

- Down lights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting

M50i (INGROUND)

The M50i in ground LED unit is designed to be recessed for in ground walkover LED lighting. This unit can be used as a marker light or effect lighting in a wide variety of applications. Manufactured from Stainless Steel 316.



It is ideal for designers and architects that require high output LED lighting using a flat frosted toughened glass lens with 3 x 1 watt LED's.

Typical Applications

- Walk over applications
- Buried uplights
- Wall Effect
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting

M50-UD Up & Down Light

The M50-UD LED lamp is designed to use Solar's MR16 3 or 6 watt LED lamp for indoor and outdoor use. It is ideal for designers who want to add an LED version of Up and Down lighting to their lighting designs taking advantage of the true colours available and extended lumen maintenance.

This versatile unit can use 2 coloured lamps and a variant of optic beams. The unit is fitted with the MR16-3 or MR16-6 LED units enabling a wide variety of colours and effects to be achieved using the range of optics available from Solar.

Typical Applications

- Column & wall lighting
- Mood lighting
- Architectural
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M50i-G (INGROUND)

The M50i-G in ground LED unit is designed to be recessed for in ground walk over and drive over LED lighting. This unit can be used as a marker light or effect lighting in a wide variety of applications.

Manufactured from Stainless Steel 316 and is fitted with globe top toughened glass. It is ideal for designers and architects that require high output LED lighting.

Typical Applications

- Walk & Drive over applications
- Buried uplights
- Wall Effect
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



M50-B (BRACKETED)

The M50-B is a 3 or 6 LED unit designed to be bracketed LED light for internal applications.

Available in a Silver aluminium finish, other finishes can be applied on request.

This offers flexibility by offering single colour or RGB systems with varying optical beam angles.

Typical Applications

- Down lights
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



Stair 3

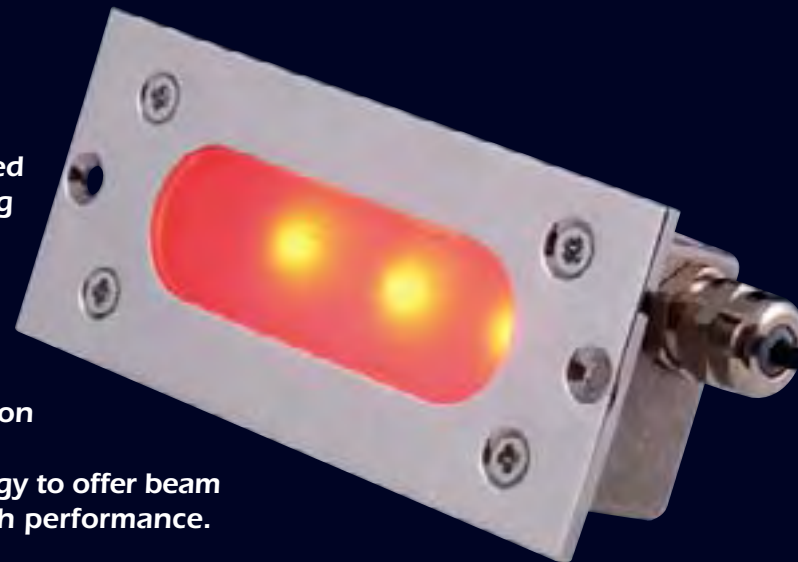
The STAIR is a 3 LUXEON LED unit designed for stair treads lighting or recessed lighting for wall washing behind seating or furniture.

The unit is available both in RGB colour change and single LED colours offering unrivalled performance in colour saturation and effects.

The unit uses the latest in optical technology to offer beam angles such as focused spots to wall wash performance.

Typical Applications

- Stair lighting
- Column and wall lighting
- Mood lighting
- Architectural lighting
- Decorative effects
- Retail & Display
- Bar & Club lighting
- Effect lighting



Sugar Hut Village
The Sugar Hut installation shows the use of L-80's and MR16's

Bespoke Design Service

This product catalogue details the extensive standard product range offered by Solar. As a "Certified Luxeon Luminaire Manufacturer" and a partner in the "Lumileds Future Electronics Solutions Provider" we also utilise our expertise in the use of Luxeon LED's by offering a bespoke design and production service to the lighting industry.

Using the highest quality products and manufacturing procedures we can assist OEM's and lighting designers in the design and production of custom or client specific luminaries. This service includes PCB design, driver design, lamp housing design, use of collimating optics, heat sinks and the manufacturing of all these elements.

Solar offer on site LED placement in the UK using an automatic pick and place machine designed for Luxeon and Luxeon K2 LED's. Solar also offer a subcontract LED placement service to other lighting manufacturers.



Solar utilise Thermal Clad Insulated Metal Substrate material to ensure the maximum thermal conductivity between the led and the heatsink. The use of this low thermal impedance product ensures that the led PCB is mechanically robust, can offer extended product life and allows products to operate cooler and brighter than conventional PCB materials.

All Solar products are machined using the latest CNC technology from quality aluminium sections or Solar specific aluminium extrusions in the UK. Products can be supplied in a wide variety of finishes including anodised and powder coated surface coatings.

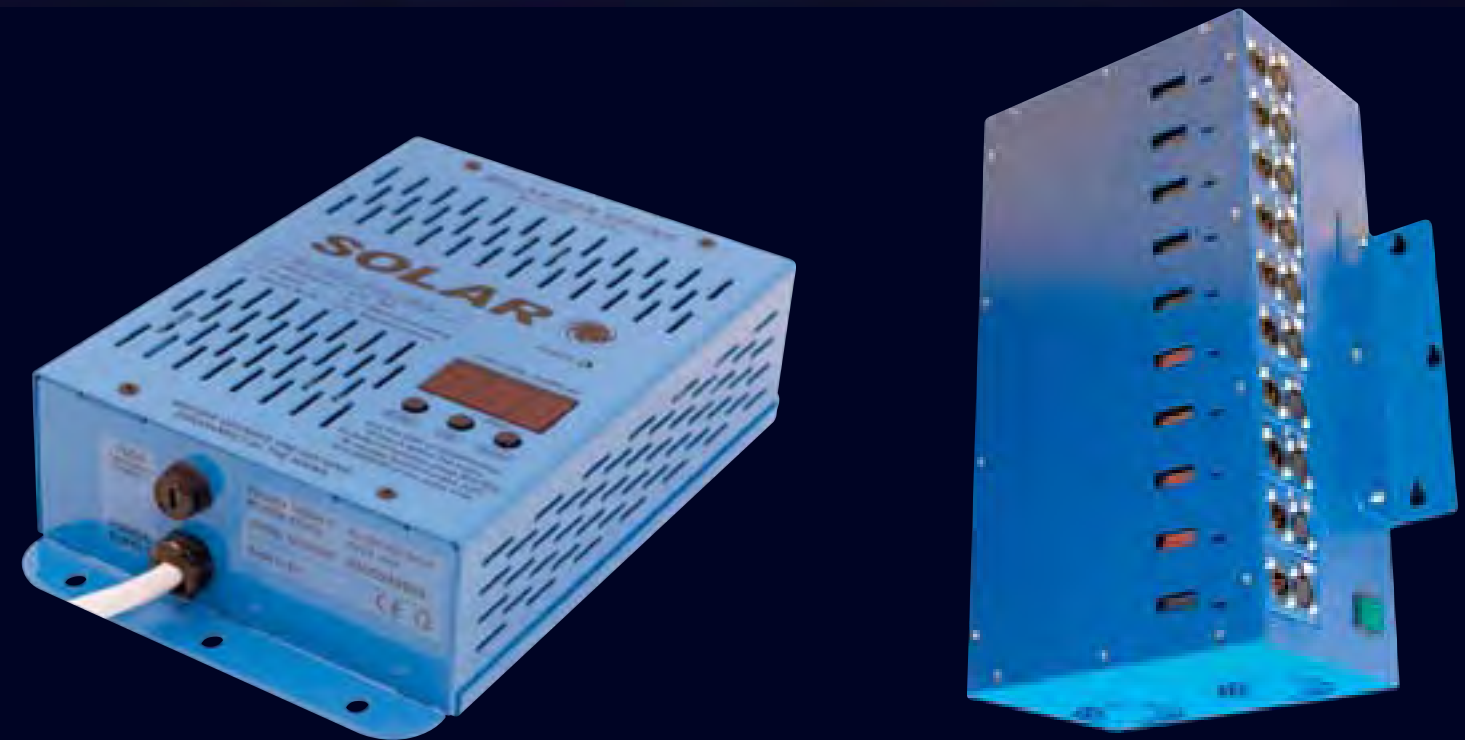
If Solar can be of assistance to you please do not hesitate to contact us on +44 (0)870 751 2860

Drivers and Controllers



Solar offer a range of drivers and controllers to suit our product requirements. We have drivers to power a single Luxeon LED 1 watt to 360 Luxeon LED's on 30 channels on DMX. As a 'Certified Luxeon Luminaire Manufacturer' and a 'Lumileds Future Electronics Solutions Provider' we have a vast range of technical expertise to either match the right driver for the right solution or either design a new one to suit your Luxeon LED needs.

Our control systems vary from simple push button pre-set panels to remote control and full DMX 512 software packages with data replay units.



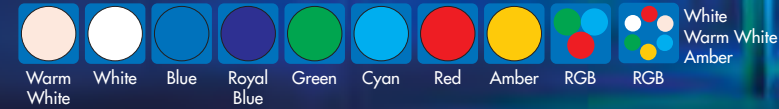
Specification Chart

Driver code	Single Colour or RGB	Quantity of LED's	DMX channels in RGB	Single colour channels
PTDCC-3-3 50	SINGLE	1 - 3	N/A	1
PTDCC-10-350	SINGLE	1 - 8	N/A	1
PTDCC-15-350	SINGLE	1 - 12	N/A	1
XTM12W	SINGLE	1 - 8	N/A	1
XTM17W	SINGLE	2 - 12	N/A	1
XTM25W	SINGLE	3 - 18	N/A	1
XTM40W	SINGLE	5 - 30	N/A	1
DLDCC/RGB NON DMX	RGB	3 - 15	N/A	N/A
SGBRGBDRIVER	RGB	3 - 36	3	N/A
SGBRGBDRIVER-DIG	RGB	3 - 36	3	N/A
BIGBOX10	RGB	30 - 360	30	N/A



▪ Standard • Option

Luxeon LED colours available



	Page	Focused	Spot	Wide	Wall Wash	Very Wide	RGB Available	RGB W WW A Available	Indoor Use Only	IP Rating	Luxeon 1 watt	Watt	Weight kg	Voltage Input to Driver Vac	Clear Toughened Glass	Frosted Toughened Glass	Globe Top	Round Bevelled Bezel	Round Flat Top Bezel	Square Bevelled Bezel	Square Flat Top Bezel	Finish Anodised Aluminium	Finish Chrome	Finish 316 Stainless Steel	
Accent																									
L-80	1	▪	▪	▪	▪	▪	▪	▪	▪	20	3	3	0.10	85-265											
ACR-40 - Acrylic Round Brick	2					▪				66	1	1	0.15	85-265		Acrylic							▪		
ACR-75 - Acrylic Round Brick	2					▪				66	3	3	0.20	85-265		Acrylic							▪		
ACR-40-S - Acrylic Saucer	2					▪	▪			66	1	1	0.15	85-265		Acrylic							▪		
ACR-75-S - Acrylic Saucer	2					▪	▪			66	3	3	0.20	85-265		Acrylic							▪		
Architectural Spot Lights																									
M80-B	3	▪	▪	▪			▪	▪		67	3-6	3-6	0.75	85-265											
M100-B-12	3	▪	▪	▪	▪	▪	▪			67	12	12	1.80	85-265									▪		
M100-B-18	4	▪		▪		▪	▪			67	18	18	1.80	85-265									▪		
M200-B	4	▪	▪	▪	▪	▪	▪			67	30-36	30-36	4.50	85-265									▪		
Bracketed Wall Wash																									
L-Series	5	▪	▪	▪	▪	▪	▪		▪	20	12-36	12-36	0.25-3.00	85-265									▪		
XL-Series	5	▪	▪	▪	▪	▪	▪			66	12-36	12-36	0.25-3.00	85-265									▪		
Inground																									
ACR-40-BEZ	7					▪				66	1	1	0.15	85-265		Acrylic		•	•			•	•	•	
ACR-75-BEZ-S	7					▪	▪			66	3	3	0.80	85-265		Acrylic		•	•			•	•	•	
M20i	8	▪	▪	▪	▪	▪		▪		44	1	1	0.10	85-265	•	•		•	•			•		•	
M80i		▪	▪	▪	▪	▪	▪			67	3-6	3-6	1.00	85-265	•	•		•	•	•	•	•	•	•	•
M100i-12	9	▪	▪	▪	▪	▪	▪			67	12	12	1.70	85-265	•	•		•	•	•	•	•	•	•	•
M100i-18	9		▪	▪		▪	▪			67	18	18	1.70	85-265	•	•		•	•	•	•	•	•	•	•
M200i	10	▪	▪	▪	▪	▪	▪			67	30-36	30-36	4.50	85-265	•	•		•	•	•	•	•	•	•	•
M63i	10	▪	▪	▪			▪		▪	44	3	3	0.50	85-265	•	•		•	•	•	•	•	•	•	•
LED Lamp Replacements																									
AR111-12	11	▪	▪	▪	▪	▪	▪		▪	20	12	12	0.50	85-265									▪		
AR111-18	11	▪		▪		▪	▪		▪	20	18	18	0.50	85-265									▪		
MR16-3	12	▪	▪	▪	▪	▪	▪		▪	20	3	3	0.10	85-265									▪		
MR16-6	12	▪		▪		▪	▪		▪	20	6	6	0.10	85-265									▪		
Specials																									
MR16-6 Six channel	13	▪	▪	▪	▪	▪	▪		▪	67	120	120	12	85-265									▪		
M50-UD - Up & Down Light	13	▪	▪	▪			▪			20	6-12	6-12	1.20	85-265									▪		
M50i	14					▪	▪		▪	64	3-6	3-6	0.50	85-265		•		▪						▪	
M50i-G	14			▪			▪			64	3-6	3-6	0.50	85-265		•	▪	▪							▪
M50-B	15	▪	▪	▪	▪	▪	▪		▪	20	3-6	3-6	0.50	85-265									▪		
Stair 3	15	▪	▪	▪	▪	▪	▪		▪	20	3	3	0.12	85-265							▪	•	•		

If used for 24 hours a day the LED's will last for the equivalent of 11 years.

The company has a policy of continuous product development and improvement, and therefore reserves the right to amend the design and specification without prior notice.